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ABSTRACT

Based on Vygotsky's notion of the zone of proximal development, this study aimed to determine the extent to which parents' teaching of children become less directive as a function of children's age and communicative status and to describe relations between parents' interaction styles and children's verbal I.Q. One hundred and twenty families participated in the study: sixty families included a communicatively handicapped target child (CH), and sixty matched families had a non-handicapped target child (NCH). Target children were divided into two age groups: 4- and 5-year-olds. Each parent engaged in a book reading task with the target child. Parents' interactions with children were classified according to levels of cognitive demand and directiveness. Results indicated that parents were generally more directive and less demanding with younger and CH children than they were with older and NCH children. Further, different types of parental interaction styles predicted CH and NCH children's I.Q. (Author/DST)

Parents' bookreading habits with their children*

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Abstract

The two objectives of this study were: to determine the extent to which parents' teaching of children become less directive as a function of children's age and communicative status; and to describe relations between parents' interaction styles and children's verbal I.Q. One hundred and twenty families participated in the study. Each family included a target child, a mother, and a father. Sixty families included a communicatively handicapped target child (CH) and sixty matched families had a non-handicapped target child (NCH). Target children were divided into two age groups: 4- and 5-year-olds. Each parent engaged in a book reading task with the target child. Parents' interactions with children were classified according to levels of cognitive demand and directiveness. Results indicated that parents were generally more directive and less demanding with younger and CH children than they were with older and NCH children. Further, different types of parental interaction styles predicted CH and NCH children's I.Q. Results are discussed in terms of Vygotsky's theory of the zone of proximal development.

Parents' bookreading habits with their children

Mothers reading books to their children has been frequently observed by educational and developmental psychologists. Researchers have used this paradigm to gain insight into children's acquisition of word meaning and to document children's development of self-regulating behaviors. In the area of the acquisition of word meaning, Werner and Kaplan (1952) hypothesized that children acquired word meaning by adults' explicit naming of objects. The research of Ninio (Ninio & Bruner, 1980; Ninio, 1980, 1983) and Snow (Snow & Perlman, in press) found that children do indeed acquire the meaning of some words through their interaction with mothers over picture books.

Based on Vygotsky's (1978) notion of the zone of proximal development, the joint bookreading model has also been used to examine children's internalization of adult provided learning strategies, or the extent to which children move from other- to self-regulation (Brown, Bransford, Ferrarra, & Campione, 1983). The zone of proximal development was defined by Vygotsky as the difference between a child's actual level of independent problem solving and the child's potential level as determined by adult guidance of the child's behavior. Vygotsky argued that through such adult-child dialogues adults teach children to plan and guide their behavior. Such adult- or other-directed teaching strategies are necessary, in this model, if children are to become self-directed problem solvers. As children develop, this adult scaffolding of children's behavior diminishes; the children themselves take on greater responsibility in task situations (Brown et al., 1983; Laboratory of Comparative Human Cognition, 1983; Vygotsky, 1978). Thus, children's developing ability to guide their behavior may be a result of their gradually

internalizing strategies learned in adult-child dialogues. It has been shown that mothers, in a learning situation, provide younger children with more support than they do older children (DeLoache, cited in Brown et al., 1983; Wertsch, McNamee, McLane & Budwig, 1980). For example, in a book reading task parents provide younger children with labels for pictures whereas they may expect older children to generate the label themselves.

The present study utilized the book reading paradigm to extend both of the above described lines of research. More specifically, the first objective of the present study was to examine the extent to which parents' verbal and nonverbal behaviors with their children become less supportive, or directive, as a function of children's age and communicative status. The second objective was to determine the extent to which these parental interaction variables related to the verbal I.Q.'s of different types of children.

Regarding the first objective, previous research has documented the other- to self-regulation progression in children from 1 1/2- to 3 1/2-years-of age (Anderson, Teale, & Estrada, 1980; DeLoache, in preparation; Wertsch, et al., 1980). DeLoache's cross-sectional study of mothers reading to children (17-38 months-of-age) found that mothers of the youngest children most directive: they pointed to and labelled objects for children. Mothers of the middle group of children were less directive in that the children were given a more active role in the activity; mothers asked them questions and children often volunteered labels. Parents of the oldest children were least directive: they related aspects of the story to aspects of the children's outside experiences. As children developed so to did the task demands mothers made on children. In this way children internalized the mothers' teaching strategies.

The present study extended the extant literature in three ways. First, we extended the age range of the children previously examined. Previous research (e.g., Anderson, Teale, & Estrada, 1980; DeLoach, in preparation; Wertsch et al., 1980) has documented other- to self-regulation in children from 1 1/2 - 4 years. We examined this phenomenon with children 4- to 5-years of age. Research suggests that this internalization process may continue to develop throughout the preschool period (Pellegrini, 1981a, 1984). It was hypothesized that parents of the older, more competent, children would provide less task support than parents of the younger, less competent, children.

Second, we examined the effects of children's communicative status on parental interaction variables. It has been found that adults talk differently to children with communication or language handicaps (CH) than they do to non-handicapped (NCH) children (Cramblit & Siegel, 1977; Leonard, 1982). The literature suggests that adult speech to handicapped children is similar to their speech to young children. That is, language to CH children, like language to younger children (Shatz, 1983), is generally simpler (e.g., in terms of syntax and lexicon) and makes fewer cognitive demands than language to their NCH agemates (Cramblit & Siegel, 1977). We expected parents to be more supportive and less demanding of CH than of NCH children.

Third, the bookreading studies to date have described only mothers' language and behaviors. In the present study we compared mothers' and fathers' language and non-verbal interaction with children in a story reading task. Though the literature generally has found few parental differences in language addressed to their children (e.g., Stoneman & Brody, 1981; Gleason & Weintraub, 1978; Golinkoff & Ames, 1979), parental differences have not been examined in the context of a bookreading task. Following the previous work on

parental language to children, we expected few differences between mothers' and fathers' interaction styles.

The second objective was to describe ways in which parental interaction variables related to children's verbal I.Q. One measure of verbal I.Q., verbal comprehension, measures children's knowledge of word meaning (Sternberg & Powell, 1983). Verbal comprehension was defined by Sternberg and Powell as "a person's ablity to comprehend verbal material such as words" (p. 389). As was noted above, theory suggests that in literate societies children's acquisition of word meaning is established through joint activities with parents, such as book reading. Parental interaction styles with their children have been shown to be related to their children's intelligence (Hess & Shipman, 1965; Schachter, 1979; Sigel, & McGillicuddy-DeLisi, 1984). Such relations have not been documented between parents and children with communication handicaps.

To summarize, the present study attempted, first, to document the extent to which parents were cognitively demanding and directive of their children in bookreading tasks. Parents' interactions with children of different ages and different levels of communicative competence were analyzed. Second, we examined the relation between these parental interaction variables and children's verbal I.Q.

Method

Subjects

One hundred and twenty families participated in the study. Families were recruited through contact with service personnel (e.g., speech and hearing clinics, and private therapists), public school systems, newspaper advertising, and posters displayed in waiting rooms of public places.

Participating families were paid $25.00 as compensation for driving expenses, babysitting and time. Each of the families included a target child between the age of 3 years 6 months and 5 years 8 months. None of the children were from non-English speaking families and all were native speakers of English.

Sixty families included a target child who was diagnosed by speech clinicians as having a language impairment or communication disorder (CH): phonological production problems and/or language production delays (Ingram, 1972). Each of these children had an audiogram to ensure their normal hearing ability. The remaining 60 families had children with no communication handicaps (NCH). Each NCH family was matched with a similar CH family. None of the children were from non-English speaking families and all were native speakers of English. The two samples were matched on children's age, sex and ordinal position, sex of sibling closest in age to the target child, number of children in the family, and parent's educational level. Parents' educational level was the mean number of years of schooling for both parents. Separate t-tests were performed on each of the above noted child and family demographic variables to determine the extent to which the CH and NCH samples differed. No significant differences were detected for any of the measures. We can assume, then, that the families were not different on these variables but were different in terms of the presence of CH or NCH children.

Children were grouped by age according to a median-split procedure. Children in the younger CH and NCH groups ranged in age from 42-53 months ($\underline{M}$ = 49.3 and 48.9, respectively); children in the older CH and NCH groups ranged in age from 56 to 68 months ($\underline{M}$ = 62.1 and 62.4, respectively). Descriptive statistics for the sample are displayed in Table 1.

/Table 1 here/

Procedures

Each parent read a different story to their child. The two stories used (equated for length and theme) were edited versions of Hello Rock by Roger Bradfield (1965) and A Rainbow of My Own by Don Freeman (1966). Both stories were read at the same session. Order of story presentation and parent order were counter-balanced.

Each parent was seated at a low table facing a one-way mirror which permitted videotaping. The book was placed on the table and the parent was told to go through the story as she/he would at home. Each child sat next to their parent so that they could both view the book. Parents were told to go through the book with their child as they would at home.

Measures

Interaction was coded directly from the videotapes, yielding frequency scores for each parent-child dyad. A total of 5 minutes were coded: the first two minutes, the last two minutes, and one minute at the midpoint of the interaction. The mean duration of all observations was 5.6 minutes (Range: 5.1-6.20).

Frequencies of parental utterances and nonverbal behaviors that accompanied or followed utterances were coded in the following categories: (1) form of parental utterance (statement, question), (2) verbal emotional direction (approval, e.g., Good), disapproval (e.g., No, that's wrong); (3) nonverbal direction (positive-physical affect, e.g., patting a child; negative-physical affect, e.g., restraining squirming child in a chair; helping or takeover, e.g., turning page when child can't; modeling or demonstration, e.g., pointing); (4) the content or mental operational demand

of the utterance (low, e.g., label, observe, describe, demonstrate; intermediate, e.g., sequence, reproduce, describe or infer similarities/differences, symmetrical/asymmetrical classifying; high, i.e., evaluate, infer cause-effect/affect/effect, generalize, propose alternatives, conclude, transform, resolve conflict; (5) frequency of utterances parents paraphrased from the book, and (6) the number of conversational turns exchanged between parent and child; i.e., the number of alternating contributions each speaker made to the conversation (Sacks, Schegloff, & Jefferson, 1976). More directive strategies were: statement, verbal and nonverbal direction, low mental demand, and more frequent conversational turns. Less directive strategies were: questions, high and medium mental demands, paraphrases, and fewer conversational turns.

The Wechsler Preschool and Primary Scales of Intelligence (WPPSI) was administered to all children by trained assistants. The verbal I.Q. scale subscore was used as the criterion variable in the regression analyses. The parent-child interactions were scored by four coders. Mean I.Q. scores for each group of children were as follows: 4-year-olds: CH: 92.61; NCH: 114.08; 5-year-olds: CH 98.79; NCH: 119.916. As can be seen the verbal I.Q. scores were biased against the CH children.

Interrater agreement was established by four coders independently scoring 96 parent-child dyad interactions. Each parental utterance or nonverbal behaviors that accompanied or followed the utterance were the units of analysis and coded. Mean agreement ($\underline{M}$ = 91.55%) was established by the averaging ($\frac{\text{agreement}}{\text{agreement + disagreement}}$) each category (e.g., form of utterance, nonverbal direction, turns).

Design

Between-subjects variables were children's age (4- and 5-years old) and children's communicative status (NCH and CH); the within-subjects variable was sex of parent (mother and father). The dependent measures, because they were interdependent, were initially analyzed with a multivariate analysis of variance (MANOVA), utilizing Wilks' criterion. Following this analysis each dependent measure was analyzed with separate univariate analyses of variance (ANOVA). Planned comparisons were calculated using Student's Newman-Keuls procedure, at the .05 level. Because the age range within each age group was large, i.e., about one year, Pearson product moment correlations were calculated between age and parental interaction variables for CH and NCH dyads within each age group. Separate step-wise regression analyses were calculated for CH and NCH groups. Parents' behaviors, collapsed across mothers and fathers, served as predictor variables. Children's verbal I.Q. scale scores served as the criterion variable.

Results

First, data will be presented on the effects of children's age and communicative status and sex of parent on parents' interaction strategies around storybooks. Second, we will examine relations between children's age and parental variables within each age and communicative group. Third, data will be presented on the extent to which parental interaction strategies related to children's verbal I.Q.'s.

/Tables 2 and 3 here/

The first series of analyses utilized 2 (age: 4- and 5-years-old) x 2 (communicative status: NCH and CH) x 2 (parental status: mother and father)

repeated measures MANOVA, with the last factor being repeated.

A significant main effect was detected only for communicative status F (11, 106) = 2.51, $p < .007$. Because neither sex of parent nor children's age had reliable effects in the MANOVA they were deleted from subsequent analyses. Separate one-way ANOVAs, with communicative status as the independent variable, were calculated on each of the nine dependent measures. Results of the ANOVAs, generally, indicate that parents were more directive and less demanding with CH children than they were with NCH children.

More specifically, as Table 3 reveals, parents utilized significantly more low mental demand strategies and conversational turns with CH children, compared to NCH children. Parents of NCH children, compared to parents of CH children, more frequently paraphrased the storybooks.

The second set of analyses examined relations between age and parental interaction variables within each age group for both CH and NCH children. These analyses were necessary in light of the large age range (i.e., almost one year) within each group. These correlation coefficients are displayed in Table 4.

/Table 4 here/.

As can be seen in Table 4, the within age group correlations between age and parental interaction were generally non-significant. Significant correlations were observed only in the CH group when we collapased the two age groups into one. No significant correlations were observed for the total NCH group. For the CH group, significant negative correlations were observed between age and: low cognitive demands, verbal/emotional support, non-verbal support and conversational turns. A significant positive correlation was found between age and paraphrasing. In other words, for the CH children, parents used less

nonverbal and verbal/emotional support and turns as children's age increased. Parents use of paraphrasing increased with children's increase in age.

The third series of analyses was concerned with identifying parental interaction strategies which best related to children's verbal I.Q. Separate stepwise regression analyses were calculated for both CH and NCH children across age. These analyses are summarized in Table 5.

/Table 5 here/

The results for the NCH group suggest that high cognitive demand strategies and questions were the best predictors, in that order, of I.Q. It should be noted, however, that questions were negatively related to I.Q. For the NCH children, verbal/emotional direction, low cognitive demands and questions, in that order, were the best predictors of I.Q.

Discussion

The first hypothesis of the study, following the Vygotskiian model, was that parents would become less directive of children as a function of children's general competence. We expected parents to be more directive and less demanding (e.g., use statements, lower cognitive demand strategies, and non-verbal direction) with less competent CH children and less directive and more demanding (e.g., use high cognitive demand strategies) with more competent NCH children. This hypothesis was partially supported.

Parents' use of two types of cognitive demand strategies (high and medium) and statements did not vary with children's age or communicative status. That parents did not use cognitively more demanding strategies (i.e., high and medium demand) with more competent, older and NCH, children, compared to less competent, younger and CH, children, is not consistent with Vygotsky's

theory of the zone of proximal development. The theory predicts that parents would use more demanding strategies with more competent children. Parents of all children did not often ask children to draw inferences or make cause-effect judgements about the content of the stories. Parents seemed more concerned with having children merely label and describe (i.e., low cognitive demands) aspects of the story.

The absence of high and medium cognitive demand strategies was probably due to the relatively simple plots, explicitly stated meanings, and character motivations of the books used (Huck, 1976). More demanding cognitive strategies may have been used by parents with books having more complex plots and multiple levels of meaning.

Regarding the low cognitive demand category, parents used more of this strategy with CH children than with NCH children. When one examines the correlations between children's age and parental interaction variables within each group, we see that, the CH children parents' use of low demand strategies decreased with age. Because this relation was observed only within the CH group, it seems as though these parents adjusted the cognitive demands of the strategies addressed to their children based on children's level of communicative competence. This may have been due to their awareness of their children's diagnosed linguistic problems. These results, like other results in the literature, suggest that parents' interaction strategies with their children are especially sensitive to children's expressive language ability (Leiffer & Lewis, in press; Rondall, 1977). These parents seem to be interacting within children's zones of proximal development based on their analyses of children's general competence, or specific linguistic competence.

Two other interaction measures were also consistent with the Vygotskiian hypothesis: conversational turns and paraphrases. Parents' interactions with CH children, compared to their interactions with NCH children, were characterized by fewer conversational turns. A large occurrence of turns in parent-child interactions often indicates that parents are actively eliciting children's utterances. Parents often use language to elicit children's responses (Ervin-Tripp, 1979; Garvey, 1984). The parents, in turn, respond to children's responses with language which will elicit more language from the children (Kay & Charney, 1980). Thus, we can speculate that parents were using their conversational turns to increasingly involve children in the business of the interaction.

Parents did not vary their use of statements according to children's levels of competence. This result, which does not support Vygotskiian theory, may have been due to the specific interactional context examined (bookreading) or to specific books read. More statements may be elicited from tasks such as puzzles or paper folding where parents help children construct an approximation of a model. Parents may use statements in those tasks to label different aspects of the tasks.

The effects of children's level of competence on paraphrasing are consistent. Parents paraphrased more for NCH children than for CH children. Paraphrasing is a relatively advanced strategy (advanced compared to questioning) used by tutors (Palincsar & Brown, 1981, cited in Brown et al., 1983), teachers (Au & Kawakami, 1984), and parents (Durkin, 1966) while interacting with elementary and older preschool children. Paraphrasing is often used as a reinforcer for children's appropriate responses. Thus, parents should use them more frequently with more competent children. We can

speculate that in paraphrasing, parents assumed that the child would implement the desired strategy because it was being reinforced. With paraphrasing the child takes on the responsibility for learning the strategy because he/she is not explicitly being guided through the task by the adult. Data, on early readers supports this notion that paraphrasing is a relatively advanced interaction teaching strategy (Durkin, 1966). Durkin (1966) found that mothers of early readers frequently paraphrased books when reading to their children. Mothers of less competent children, nonreaders, tended ask their children questions about the text, and not to paraphrase the text.

To summarize the results from the first objective of this study, parents, generally, treated CH and NCH children differently. That is, parents were more directive and less demanding of the less competent, CH, children than of the more competent, NCH, children. These results, like other results from the parent-child interaction literature, suggest that parents use these simple strategies with less competent language users (Moerk, 1980; Snow, 1977). Parents, as well as other non-related adults, seem to adjust the complexity of the language addressed to children according to children's level of competence. In this study, we found that children's communicative status, not age, affected parents interaction styles. The absence of age effects may have been due to the small age span (i.e., one year) between the groups. Further, those competencies usually represented in a proxy variable such as age may have been represented in the communicative competence variable. As such, our measure of communicative competence may have been a more general measure of competence.

That parents adjusted their interaction styles to children's level of communicative competence is further documented by the mother-father

comparisons: No significant differences were observed between parents on the interaction measures. Both parents used similar language and non-verbal behaviors while interacting with their children around story books. Again, this is consistent with the studies that have compared parental language to children in nonbookreading situations (e.g., Golinkoff & Ames, 1979; Stoneman & Brody, 1981).

The second objective of this study was to examine relations between parents' interaction strategies and children's verbal I.Q. As noted above, the verbal I.Q. measure was biased against the CH group. Regression analyses, again, indicated that parents used different strategies with CH and NCH children. For NCH children, parents' use of demanding cognitive strategies (i.e., higher cognitive demand) related to I.Q. With CH children, on the other hand, less demanding strategies (verbal-emotional direction and low cognitive demand) related to I.Q. These results suggest that parents teach children through their zone of proximal development. It is particularly instructive, from an applied perspective, to note that "high level" strategies were not related to I.Q. scores for all children. The "low level" strategies were related to the I.Q. scores of the CH children, while the "high level" strategies were more effective with the NCH children. These results indicated that adults' teaching strategies, like other aspects of adults' language to children, are adjusted to the children's level of competence. Too often we advocate the use of the higher-level strategy and warn against the uses of the lower-level strategies (e.g., Hess & Shipman, 1962). These results, like Hunt's (1961) notion of "the match", suggest that instructional strategies should be congruent with children's level of competence.

In conclusion, the data from the present study provide partial support for the Vygotskiian notion that adults act as scaffolds for children in learning situations. As children develop and become more competent, adults are more demanding and less directive of children. In the present study both mothers and fathers adjusted their interaction styles to match the competence levels of their children. A word of caution, however, should be voiced in interpreting the results from this study. We do not know if children influenced parents' behavior or if parents' influenced children's behavior. This cannot be determined from the present results. We can, however, safely say that in this study parent-child interaction varied significantly when children differed in levels of competence. The different parental interactional styles may have been due to parents' conceptions of their children's competence rather than to their adjusting their styles to children's actual levels of competence.

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Table 1

Children's Ages* by Communicative Status

	Communication Handicapped	Non-Handicapped
4-year-olds		
Range	42-53	43-53
M	49.3	48.9
SD	3.8	3.2
5-year-olds		
Range	58-68	56-67
M	62.1	62.4
SD	3.6	3.6

*Ages expressed in months

Table 2

FREQUENCIES FOR PARENTAL INTERACTION VARIABLES
BY CHILDREN'S AGE AND COMMUNICATIVE STATUS

	4-Year-Olds				5-Year-Olds			
	Communication Handicapped		Non-handicapped		Communication Handicapped		Non-handicapped	
	M	SD	M	SD	M	SD	M	SD
Statements	19.67	(8.55)	19.47	(7.39)	19.18	(8.86)	17.52	(8.01)
Questions	28.80	(10.90)	26.69	(9.69)	28.53	(10.28)	25.18	(7.80)
Verbal/Emotional Support	10.83	(5.14)	10.11	(4.98)	9.89	(5.37)	8.66	(4.21)
Nonverb Management	19.27	(12.15)	18.52	(14.62)	18.29	(15.98)	11.81	(10.78)
High Demand	16.88	(7.89)	18.40	(7.08)	16.68	(7.41)	18.45	(7.73)
Medium Demand	3.41	(2.91)	3.54	(2.73)	3.22	(2.62)	3.20	(2.31)
Low Demand	32.53	(14.69)	25.20	(9.64)	31.67	(14.92)	20.62	(8.15)
Paraphrasing	68.20	(31.25)	79.16	(29.66)	71.15	(29.50)	94.35	(22.30)
Turns	76.43	(18.45)	70.50	(15.58)	72.51	(19.75)	62.39	(16.17)

Table 3

SUMMARY OF ANOVA RESULTS FOR COMPETENCE EFFECTS ON INTERACTION VARIABLES

Dependent Variables	MS	F	Contrast
Statements	164.986	0.41	ns
Questions	229.683	3.49	ns
Verbal/Emotional	57.567	.05	ns
Nonverbal Mngt.	493.316	2.13	ns
High Demand	139.527	2.29	ns
Medium Demand	12.768	.07	ns
Low Demand	456.237	20.10**	CH>NCH
Paraphrase	1984.158	14.73**	NCH>CH
Turns	889.199	7.16**	CH>NCH

[1] $df = 1.119$, *$p < .05$; **$p < .01$.

Table 4

CORRELATION COEFFICIENTS BETWEEN CHILDREN'S AGE AND PARENT INTERACTION VARIABLES FOR EACH GROUP OF CHILDREN[1]

Interaction Variables	4-year-olds				5-year-olds				Total			
	NCH		CH		NCH		CH		NCH		CH	
	Age	IQ	Age	IQ	Age	IQ	Age	IQ	Age	IQ	Age	IQ
Statements	-.22	.006	-.05	-.14	-.02	-.08	-.17	-.16	-.08	.04	-.19	-.10
Questions	-.32	-.03	-.14	-.23	.11	-.02	-.02	.08	-.06	-.09	-.14	-.06
Verbal/ Emotional	.01	.04	-.10	.46**	.19	.15	.02	.25	.05	-.04	-.26*	.26
Nonverbal Management	-.35	-.22	-.01	-.14	.03	-.52**	-.14	-.21	-.10	-.20	-.28	.25*
High Demand	-.30	.24	.12	-.06	.20	.51**	.18	-.01	-.02	.16	.08	.13
Medium Demand	-.25	-.002	.03	-.15	.18	-.12	-.21	.26	-.06	-.02	-.11	-.57**
Low Demand	-.02	-.40*	-.25	.39*	-.08	-.68**	-.32	-.08	-.05	-.34**	-.38**	-.30*
Paraphrase	.01	.01	.07	.27	-.35	.09	-.08	-.18	-.03	.21	.31*	.22
Turns	-.19	-.40*	.07	-.20	-.03	.21	-.24	-.007	-.15	-.33**	-.32**	-.18

[1] df = 28 for each age group, df = 58 for total. *p < .05. **p < .01.

Table 5

STEPWISE REGRESSION ANALYSES FOR PARENTAL PREDICTORS OF CHILDREN'S I.Q. BY COMMUNICATIVE STATUS[1]

NCH Children

Variable entered	R^2	df	F	B-value
High cognitive demand	.49	1,59	27.61*	.52
Questions	.53	2,59	9.42*	-.34

CH Children

Variable entered	R^2	df	F	B-value
Verbal Support	.19	1,59	13.72*	.88
Low Cognitive Demand	.24	2,59	8.96*	.20
Questions	.27	3,59	6.89	.22

[1]Only variables meeting the .05 significance level were entered into the model.
*$p < .01$.